

BC #40



PCT09

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/914,883

DATE: 02/13/2002
TIME: 10:06:37

Input Set : A:\seqlist.txt
Output Set: N:\CRF3\02132002\I914883.raw

ENTERED

C--> 4 <110> APPLICANT: Vinals y de Bassols, Carlota
6 <120> TITLE OF INVENTION: NOVEL USES
9 <130> FILE REFERENCE: BC45224
11 <140> CURRENT APPLICATION NUMBER: 09/914,883
12 <141> CURRENT FILING DATE: 2002-01-22
14 <150> PRIOR APPLICATION NUMBER: 9905124.5
15 <151> PRIOR FILING DATE: 1999-03-05
17 <150> PRIOR APPLICATION NUMBER: PCT/EP00/01587
18 <151> PRIOR FILING DATE: 2000-02-28
20 <160> NUMBER OF SEQ ID NOS: 14
22 <170> SOFTWARE: FastSEQ for Windows Version 4.0
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 3768
26 <212> TYPE: DNA
27 <213> ORGANISM: Homo sapiens
29 <400> SEQUENCE: 1
30 aacaaaagct ggagctccac cgcggtggcg gccgctctag cccctgggtc ggcccacctc 60
31 tgaaggttcc agaatcgata gtgaattcgt ggggaagcgc agccatggct ctgcggaggc 120
32 tggggggccgc gctgctgctg ctgccgctgc tcgccgccgt ggaagaaacg ctaatggact 180
33 ccaactacagc gactgctgag ctgggctgga tgggtcatcc tccatcaggg tgggaagagg 240
34 tgagtggcta cgatgagaac atgaacacga tccgcacgta ccagggtgtg aacgtgtttg 300
35 agtcaagcca gaacaactgg ctacggacca agtttatccg gcgccgtggc gccaccgcga 360
36 tccacgtgga gatgaagttt tcggtgctg actgcagcag catccccagc gtgcctgggt 420
37 cctgcaagga gaccttcaac ctctattact atgaggctga ctttgactcg gccaccaaga 480
38 ccttccccaa ctggatggag aatccatggg tgaaggtgga taccattgca gccgacgaga 540
39 gcttctccca ggtggacctg ggtggccgcg tcatgaaaat caacaccgag gtgcggagct 600
40 tcggacctgt gtcccgagc ggcttctacc tggccttcca ggactatggc ggctgcatgt 660
41 ccctcatcgc cgtgcgtgtc ttctaccgca agtgcccccg catcatccag aatggcgcca 720
42 tcttccagga aacctgtcg ggggctgaga gcacatcgct ggtggctgcc cggggcagct 780
43 gcatcgccaa tgcggaagag gtggatgtac ccatcaagct ctactgtaac ggggacggcg 840
44 agtggctggt gccatcggg cgctgcatgt gcaaagcagg cttcgaggcc gttgagaatg 900
45 gcaccgtctg ccgaggttgt ccatctggga ctttcaaggc caaccaaggg gatgaggcct 960
46 gtaccactg tcccatcaac agccggacca cttctgaagg gccaccaac tgtgtctgcc 1020
47 gcaatggcta ctacagagca gacctggacc ccctggacat gccctgcaca accatcccct 1080
48 ccgcgcccc a gctgtgatt tccagtgtca atgagacctc cctcatgctg gagtggacct 1140
49 ctccccgcga ctccggaggc cgagaggacc tcgtctacaa catcatctgc aagagctgtg 1200
50 gctcggggcg ggtgacctgc acccgctgcg gggacaatgt acagtacgca ccacgccagc 1260
51 taggcctgac cgagccacgc atttacatca gtgacctgct ggcccacacc cagtacacct 1320
52 tcgagatcca ggtgtgaac ggcgttactg accagagccc cttctgcgct cagttcgccct 1380
53 ctgtgaacat caccaccaac caggcagctc catcggcagt gtccatcatg catcagggtga 1440
54 gccgcaccgt ggacagcatt accctgtcgt ggtcccagcc agaccagccc aatggcgtga 1500
55 tcctggacta tgagctgcag tactatgaga aggagctcag tgagtacaac gccacagcca 1560
56 taaaaagccc caccaacacg gtcaccgtgc agggcctcaa agccggcgcc atctatgtct 1620

RAW SEQUENCE LISTING

DATE: 02/13/2002

PATENT APPLICATION: US/09/914,883

TIME: 10:06:37

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\02132002\I914883.raw

```

57 tccaggtgcg ggcacgcacc gtggcaggct acgggcgcta cagcggcaag atgtacttcc 1680
58 agaccatgac agaagccgag taccagacaa gcatccagga gaagttgcca ctcatcatcg 1740
59 gctcctcgge cgtggcctg gtcttctca ttgctgtggt tgtcatcgcc atcgtgtgta 1800
60 acagaagacg ggggtttgag cgtgctgact cggagtacac ggacaagctg caacactaca 1860
61 ccagtgGCCa catgacCCCa ggcAtgaaga tctacatcga tcctttcacc tacgaggacc 1920
62 ccaacgaggc agtgcgggag tttgccaagg aaattgacat ctctgtgtc aaaattgagc 1980
63 aggtgatcgg agcaggggag tttggcgagg tctgcagtgg ccacctgaag ctgccaggca 2040
64 agagagagat ctttgtggcc atcaagacgc tcaagtggg ctacacggag aagcagcgcc 2100
65 gggacttctt gagcgaagcc tccatcatgg gccagttcga ccatcccaac gtcattccacc 2160
66 tggaggggtgt cgtgaccaag agcacacctg tgatgatcat caccgagttc atggagaatg 2220
67 gctccctgga ctcttttctc cggcaaaacg atgggcagtt cacagtcac cagctggtgg 2280
68 gcatgcttgc gggcatcgca gctggcatga agtacctggc agacatgaac tatgttcacc 2340
69 gtgacctggc tgcccgcaac atcctcgta acagcaacct ggtctgcaag gtgtcggact 2400
70 ttgggctctc acgctttcta gaggacgata cctcagaccc cacctacacc agtgccctgg 2460
71 gcggaaagat ccccatccgc tggacagccc cggaaagccat ccagtaccgg aagttcacct 2520
72 cggccagtga tgtgtggagc tacggcattg tcatgtggga ggtgatgtcc tatggggagc 2580
73 ggccctactg ggacatgacc aaccaggatg taatcaatgc cattgagcag gactatcggc 2640
74 tgccaccgcc catggactgc ccgagcgccc tgcaccaact catgctggac tgttggcaga 2700
75 aggaccgcaa ccaccggccc aagttcggcc aaattgtcaa cacgctagac aagatgatcc 2760
76 gcaatcccaa cagcctcaaa gccatggcgc cctctctc tgccatcaac ctgccgctgc 2820
77 tggaccgcac gatcccgac tacaccagct ttaacacggt ggacgagtg ctggaggcca 2880
78 tcaagatggg gcagtacaag gagagcttgc ccaatgccg cttcacctcc tttgacgtcg 2940
79 tgtctcagat gatgatggag gacattctcc gggttgggct cactttggct ggccaccaga 3000
80 aaaaaatcct gaacagtatc caggtgatgc gggcgcagat gaaccagatt cagtctgtgg 3060
81 aggtttgaca ttcacctgcc tgggtcacc tcttctcca agccccgcc cctctgcccc 3120
82 acgtgccggc cctcctggtg ctctatccac tgcagggcca gccactcgcc aggaggccac 3180
83 gggccacggg aagaaccaag cggtgccagc cacgagacgt caccaagaaa acatgcaact 3240
84 caaacgacgg aaaaaaaaaa ggaatgggaa aaaagaaaac agatcctggg agggggcggg 3300
85 aaatacaagg aatatttttt aaagaggatt ctcataagga aagcaatgac tgttcttgcg 3360
86 ggggataaaa aagggttgag gagattcatg cgatgtgtcc aatcggagac aaaagcagtt 3420
87 tctctccaac tccctctggg aaggtgacct ggccagagcc aagaaacact ttcagaaaaa 3480
88 caaatgtgaa ggggagagac aggggcggcc cttggctcct gtccctgctg ctcccttagg 3540
89 cctcaactcaa caaccaagcg cctggaggac gggacagatg gacagacagc caccctgaga 3600
90 acccctctgg gaaaatctat tctgccacc actgggcaaa cagaagaatt tttctgtctt 3660
91 tggagagtat tttagaaact ccaatgaaag acactgtttc tctgttggc tcacagggct 3720
92 gaaaggggct tttgtctctc tgggtcaggg agaacgcggg gacccag 3768

```

94 <210> SEQ ID NO: 2

95 <211> LENGTH: 986

96 <212> TYPE: PRT

97 <213> ORGANISM: Homo sapiens

99 <400> SEQUENCE: 2

```

100 Met Ala Leu Arg Arg Leu Gly Ala Ala Leu Leu Leu Leu Pro Leu Leu
101 1 5 10 15
102 Ala Ala Val Glu Glu Thr Leu Met Asp Ser Thr Thr Ala Thr Ala Glu
103 20 25 30
104 Leu Gly Trp Met Val His Pro Pro Ser Gly Trp Glu Glu Val Ser Gly
105 35 40 45
106 Tyr Asp Glu Asn Met Asn Thr Ile Arg Thr Tyr Gln Val Cys Asn Val
107 50 55 60

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/914,883

DATE: 02/13/2002

TIME: 10:06:37

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\02132002\I914883.raw

```

108 Phe Glu Ser Ser Gln Asn Asn Trp Leu Arg Thr Lys Phe Ile Arg Arg
109 65 70 75 80
110 Arg Gly Ala His Arg Ile His Val Glu Met Lys Phe Ser Val Arg Asp
111 85 90 95
112 Cys Ser Ser Ile Pro Ser Val Pro Gly Ser Cys Lys Glu Thr Phe Asn
113 100 105 110
114 Leu Tyr Tyr Tyr Glu Ala Asp Phe Asp Ser Ala Thr Lys Thr Phe Pro
115 115 120 125
116 Asn Trp Met Glu Asn Pro Trp Val Lys Val Asp Thr Ile Ala Ala Asp
117 130 135 140
118 Glu Ser Phe Ser Gln Val Asp Leu Gly Gly Arg Val Met Lys Ile Asn
119 145 150 155 160
120 Thr Glu Val Arg Ser Phe Gly Pro Val Ser Arg Ser Gly Phe Tyr Leu
121 165 170 175
122 Ala Phe Gln Asp Tyr Gly Gly Cys Met Ser Leu Ile Ala Val Arg Val
123 180 185 190
124 Phe Tyr Arg Lys Cys Pro Arg Ile Ile Gln Asn Gly Ala Ile Phe Gln
125 195 200 205
126 Glu Thr Leu Ser Gly Ala Glu Ser Thr Ser Leu Val Ala Ala Arg Gly
127 210 215 220
128 Ser Cys Ile Ala Asn Ala Glu Glu Val Asp Val Pro Ile Lys Leu Tyr
129 225 230 235 240
130 Cys Asn Gly Asp Gly Glu Trp Leu Val Pro Ile Gly Arg Cys Met Cys
131 245 250 255
132 Lys Ala Gly Phe Glu Ala Val Glu Asn Gly Thr Val Cys Arg Gly Cys
133 260 265 270
134 Pro Ser Gly Thr Phe Lys Ala Asn Gln Gly Asp Glu Ala Cys Thr His
135 275 280 285
136 Cys Pro Ile Asn Ser Arg Thr Thr Ser Glu Gly Ala Thr Asn Cys Val
137 290 295 300
138 Cys Arg Asn Gly Tyr Tyr Arg Ala Asp Leu Asp Pro Leu Asp Met Pro
139 305 310 315 320
140 Cys Thr Thr Ile Pro Ser Ala Pro Gln Ala Val Ile Ser Ser Val Asn
141 325 330 335
142 Glu Thr Ser Leu Met Leu Glu Trp Thr Pro Pro Arg Asp Ser Gly Gly
143 340 345 350
144 Arg Glu Asp Leu Val Tyr Asn Ile Ile Cys Lys Ser Cys Gly Ser Gly
145 355 360 365
146 Arg Gly Ala Cys Thr Arg Cys Gly Asp Asn Val Gln Tyr Ala Pro Arg
147 370 375 380
148 Gln Leu Gly Leu Thr Glu Pro Arg Ile Tyr Ile Ser Asp Leu Leu Ala
149 385 390 395 400
150 His Thr Gln Tyr Thr Phe Glu Ile Gln Ala Val Asn Gly Val Thr Asp
151 405 410 415
152 Gln Ser Pro Phe Ser Pro Gln Phe Ala Ser Val Asn Ile Thr Thr Asn
153 420 425 430
154 Gln Ala Ala Pro Ser Ala Val Ser Ile Met His Gln Val Ser Arg Thr
155 435 440 445
156 Val Asp Ser Ile Thr Leu Ser Trp Ser Gln Pro Asp Gln Pro Asn Gly

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/914,883

DATE: 02/13/2002

TIME: 10:06:37

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\02132002\I914883.raw

```

157      450      455      460
158 Val Ile Leu Asp Tyr Glu Leu Gln Tyr Tyr Glu Lys Glu Leu Ser Glu
159 465      470      475      480
160 Tyr Asn Ala Thr Ala Ile Lys Ser Pro Thr Asn Thr Val Thr Val Gln
161      485      490      495
162 Gly Leu Lys Ala Gly Ala Ile Tyr Val Phe Gln Val Arg Ala Arg Thr
163      500      505      510
164 Val Ala Gly Tyr Gly Arg Tyr Ser Gly Lys Met Tyr Phe Gln Thr Met
165      515      520      525
166 Thr Glu Ala Glu Tyr Gln Thr Ser Ile Gln Glu Lys Leu Pro Leu Ile
167      530      535      540
168 Ile Gly Ser Ser Ala Ala Gly Leu Val Phe Leu Ile Ala Val Val Val
169 545      550      555      560
170 Ile Ala Ile Val Cys Asn Arg Arg Gly Phe Glu Arg Ala Asp Ser Glu
171      565      570      575
172 Tyr Thr Asp Lys Leu Gln His Tyr Thr Ser Gly His Met Thr Pro Gly
173      580      585      590
174 Met Lys Ile Tyr Ile Asp Pro Phe Thr Tyr Glu Asp Pro Asn Glu Ala
175      595      600      605
176 Val Arg Glu Phe Ala Lys Glu Ile Asp Ile Ser Cys Val Lys Ile Glu
177      610      615      620
178 Gln Val Ile Gly Ala Gly Glu Phe Gly Glu Val Cys Ser Gly His Leu
179 625      630      635      640
180 Lys Leu Pro Gly Lys Arg Glu Ile Phe Val Ala Ile Lys Thr Leu Lys
181      645      650      655
182 Ser Gly Tyr Thr Glu Lys Gln Arg Arg Asp Phe Leu Ser Glu Ala Ser
183      660      665      670
184 Ile Met Gly Gln Phe Asp His Pro Asn Val Ile His Leu Glu Gly Val
185      675      680      685
186 Val Thr Lys Ser Thr Pro Val Met Ile Ile Thr Glu Phe Met Glu Asn
187      690      695      700
188 Gly Ser Leu Asp Ser Phe Leu Arg Gln Asn Asp Gly Gln Phe Thr Val
189 705      710      715      720
190 Ile Gln Leu Val Gly Met Leu Arg Gly Ile Ala Ala Gly Met Lys Tyr
191      725      730      735
192 Leu Ala Asp Met Asn Tyr Val His Arg Asp Leu Ala Ala Arg Asn Ile
193      740      745      750
194 Leu Val Asn Ser Asn Leu Val Cys Lys Val Ser Asp Phe Gly Leu Ser
195      755      760      765
196 Arg Phe Leu Glu Asp Asp Thr Ser Asp Pro Thr Tyr Thr Ser Ala Leu
197      770      775      780
198 Gly Gly Lys Ile Pro Ile Arg Trp Thr Ala Pro Glu Ala Ile Gln Tyr
199 785      790      795      800
200 Arg Lys Phe Thr Ser Ala Ser Asp Val Trp Ser Tyr Gly Ile Val Met
201      805      810      815
202 Trp Glu Val Met Ser Tyr Gly Glu Arg Pro Tyr Trp Asp Met Thr Asn
203      820      825      830
204 Gln Asp Val Ile Asn Ala Ile Glu Gln Asp Tyr Arg Leu Pro Pro Pro
205      835      840      845

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/914,883

DATE: 02/13/2002

TIME: 10:06:37

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\02132002\I914883.raw

```

206 Met Asp Cys Pro Ser Ala Leu His Gln Leu Met Leu Asp Cys Trp Gln
207      850                      855                      860
208 Lys Asp Arg Asn His Arg Pro Lys Phe Gly Gln Ile Val Asn Thr Leu
209 865                      870                      875                      880
210 Asp Lys Met Ile Arg Asn Pro Asn Ser Leu Lys Ala Met Ala Pro Leu
211                      885                      890                      895
212 Ser Ser Gly Ile Asn Leu Pro Leu Leu Asp Arg Thr Ile Pro Asp Tyr
213                      900                      905                      910
214 Thr Ser Phe Asn Thr Val Asp Glu Trp Leu Glu Ala Ile Lys Met Gly
215                      915                      920                      925
216 Gln Tyr Lys Glu Ser Phe Ala Asn Ala Gly Phe Thr Ser Phe Asp Val
217      930                      935                      940
218 Val Ser Gln Met Met Met Glu Asp Ile Leu Arg Leu Gly Val Thr Leu
219 945                      950                      955                      960
220 Ala Gly His Gln Lys Lys Ile Leu Asn Ser Ile Gln Val Met Arg Ala
221                      965                      970                      975
222 Gln Met Asn Gln Ile Gln Ser Val Glu Val
223      980                      985
225 <210> SEQ ID NO: 3
226 <211> LENGTH: 3949
227 <212> TYPE: DNA
228 <213> ORGANISM: Homo sapiens
230 <400> SEQUENCE: 3
231 gaattccgcc cgggaagcg cagccatggc tctgcggagg ctggggggccg cgctgctgct      60
232 gctgccgctg ctgcgcgcgc tggaagaaac gctaattggac tccactacag cgactgctga      120
233 gctgggctgg atggtgcatc ctccatcagg gtgggaagag gtgagtggct acgatgagaa      180
234 catgaacacg atccgcacgt accaggtgtg caacgtgttt gagtcaagcc agaacaactg      240
235 gctacggacc aagtttatcc ggcgcgctgg cgcccaccgc atccacgtgg agatgaagtt      300
236 ttcggtgctg gactgcagca gcatccccag cgtgcctggc tcctgcaagg agaccttcaa      360
237 cctctattac tatgaggctg actttgactc ggccaccaag accttcccca actggatgga      420
238 gaatccatgg gtgaaggctg ataccattgc agccgacgag agcttctccc aggtggacct      480
239 ggggtggcgc gtcatgaaaa tcaacaccga ggtgcggagc ttcggacctg tgtcccgcat      540
240 cggtctctac ctggccttcc aggactatgg cggtgcctg tccctcatcg ccgtgctgtg      600
241 cttctaccgc aagtgcctcc gcatcatcca gaatggcgcc atcttccagg aaacctgtc      660
242 gggggctgag agcacatcgc tgggtgctgc ccggggcagc tgcctcgcca atgcggaaga      720
243 ggtggatgta cccatcaagc tctactgtaa cggggacgac gagggtgctg tgcccatcgg      780
244 gcgctgcatg tgcaaagcag gcttcgaggc cgttgagaat ggcaccgtct gccgaggttg      840
245 tccatctggg actttcaagg ccaaccaagg ggatgaggcc tgtaccact gtcccatcaa      900
246 cagccggacc acttctgaag gggccaccaa ctgtgtctgc cgcaatggct actacagagc      960
247 agacctggac cccctggaca tgccctgcac aaccatcccc tccgcgcccc aggctgtgat      1020
248 ttccagtgtc aatgagacct cctcatgct ggagtggacc cctccccgcg actccggagg      1080
249 ccgagaggac ctgctctaca acatcatctg caagagctgt ggctcgggcc ggggtgcctg      1140
250 caccgcgtgc ggggacaatg tacagtacgc accacgccag ctaggcctga ccgagccacg      1200
251 catttacatc agtgacctgc tggcccacac ccagtacacc ttcgagatcc aggctgtgaa      1260
252 cggcgttact gaccagagcc ccttctcgcc tcagttcgcc tctgtgaaca tcaccaccaa      1320
253 ccaggcagct ccacggcgag tgtccatcat gcatcagggt agccgcaccg tggacagcat      1380
254 taccctgtcg tgggtcccagc cagaccagcc caatggcgct atcctggact atgagctgca      1440
255 gtactatgag aaggagctca gtgagtacaa cgccacagcc ataaaaagcc ccaccaacac      1500
256 ggtcaccgtg cagggcctca aagccggcgc catctatgtc ttccaggtgc gggcacgcac      1560

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/914,883

DATE: 02/13/2002

TIME: 10:06:38

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\02132002\I914883.raw

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date